

Chapter 2

Duties of Key Personnel

The duties and responsibilities of key personnel assigned to the Paladin firing battery are discussed in this chapter. These duties and responsibilities are in addition to those listed in FM 6-50, Chapter 1. The duties and responsibilities of the battalion commander and his staff have not changed significantly as covered in FM 6-20-1.

BATTERY COMMANDER

GENERAL DUTIES

2-1. The battery commander (BC) commands and controls the Paladin battery and directs its employment in accordance with assigned missions. He is responsible for battery training, combat readiness, morale, welfare, and all aspects of operations. He establishes standards for the battery and ensures that those standards are achieved and sustained. As the senior battery trainer he is responsible for the professional development of the platoon leaders and fire direction officers.

SPECIFIC DUTIES

- Plans and conducts reconnaissance of the unit headquarters position and selects a series of position areas (PAs) for each platoon.
- Ensures proper terrain coordination with higher headquarters, maneuver elements, and adjacent units to facilitate timely position occupations by battery vehicles and personnel.
- Supervises platoon leaders' operations. To the maximum extent possible, maintains a presence in the PA and in the POCs teaching, supervising, and ensuring adherence to standards.
- Coordinates with the battalion S3 and reconnaissance and survey officer for survey requirements to include navigation update points.
- Obtains survivability move criteria from the battalion operations section and provides to platoon leaders. These criteria are based primarily on the anticipated level of threat and the terrain available in accordance with (IAW) the factors of mission, enemy, terrain and weather, troops, time available, and civil considerations (METT-TC) and the unit's tactical standing operating procedures (TSOP).

EQUIPMENT REQUIREMENTS

2-2. The BC must continue to be mobile on the battlefield. Paladin tactics require the BC to have a combat vehicle, driver, secure GPS/PLGR, and two long-range radios.

FIRST SERGEANT

GENERAL DUTIES

2-3. The firing battery first sergeant (1SG) assists the BC in the command and control of the battery in an expanded battlespace. He provides leadership and guidance for the battery's enlisted personnel. He is the primary trainer for enlisted personnel. Additionally, he supervises all administrative and logistical support requirements. His principal assistants include the battery supply sergeant and the maintenance contact team chief.

SPECIFIC DUTIES

- Coordinates battery supply, maintenance, and food service operations.
- Maintains a presence in the PAs supervising the platoon sergeants, gunnery sergeants, and Paladin section chiefs.
- Ensures platoon sergeants establish adequate security for their elements.
- Develops, integrates, and supervises the security plan as appropriate.

EQUIPMENT REQUIREMENTS

2-4. A Paladin battery 1SG must have a high-mobility multipurpose wheeled vehicle (HMMWV), driver, secure GPS/PLGR, and two long-range radios to accomplish his duties.

FIRING PLATOON LEADER

GENERAL DUTIES

2-5. The firing platoon leader commands and controls the Paladin platoon. He is responsible for all actions of the platoon to include tactical movement, continuous day/night and degraded operations, defense, communications, individual training, and enforcement of battery standards.

2-6. During tactical operations, he positions himself to facilitate command and control of the platoon. For example, during a movement to contact, the platoon leader could be at a critical terrain choke point and may need to coordinate with maneuver elements to facilitate passage through a minefield. In the defense, he could be located in an overwatch position monitoring survivability moves or key avenues of approach.

2-7. The firing platoon leader relies heavily on the platoon sergeant to supervise the firing elements and on the gunnery sergeant (GSG) to conduct reconnaissance, selection, and occupation of the position (RSOP).

SPECIFIC DUTIES

- Plans, coordinates, supervises, and directs Paladin platoon operations to include:
 - Plans and issues platoon operations/movement orders.
 - Conducts in-depth platoon rehearsals.
 - Updates platoon on tactical situation and survivability movement criteria.
 - Plans and supervises platoon tactical moves.

- Verifies database in AFCS during initialization or as required.
- Manages and tracks platoon ammunition status.
- Ensures AFCS and LCU databases are input correctly and that independent secondary checks are made of all entries.
- Ensures an independent secondary check is performed for all survey data.
- Ensures verification of howitzer location as required.

EQUIPMENT REQUIREMENT

2-8. The firing platoon leader must have a dedicated vehicle in order to accomplish his duties and execute battle command of his platoon. A combat vehicle is required for the platoon leader to include a driver, two radios, and a secure GPS.

PLATOON FIRE DIRECTION OFFICER

GENERAL DUTIES

2-9. The platoon fire direction officer (FDO) is responsible for the training and supervision of the POC personnel. He supervises the establishment, verification, and maintenance of the platoon computer database, ensuring that all reports are received, recorded, and processed, as required by the unit TSOP. He must also be familiar with the duties of the platoon leader, as he may be called upon to assume these duties in addition to his own.

- If required, verifies database in AFCS during initialization.
- Provides tactical fire direction.
- Supervises the overall conduct of fires.
- Reviews fire mission: call for fire (FM:CFF) as necessary. Selects the shell-fuze and propelling charge for each howitzer in order to decrease the fire mission processing time at the howitzer and to achieve optimum effects on target commensurate with ammunition on hand.
- Tracks ammunition count and usage; recommends ammunition distribution plan to the platoon leader.
- Informs section chiefs of the overall tactical situation and provides guidance on positioning. Ensures howitzers do not emplace in areas just vacated and susceptible to counterfire.
- Reports platoon logistical and administrative requirements to the 1SG as appropriate.
- Controls the fires of the other Paladin platoon in the battery as required.
- Exchanges key POC database information with the other POC.
- Maintains capability of computing the technical firing solution for any degraded howitzers.

SPECIFIC DUTIES

- Primary duty to compute executive officer's (XO's) minimum quadrant elevation (min QE) based on worst case site to crest data provided by the GSG.
- Verifies the technical databases for AFATDS, BCS, and AFCS, specifically:

- Howitzer location, azimuth of fire (AOF), and powder temperature.
- MV files, target files, ammunition files.
- Verification mission to validate initial database and changes to database.
- Application of registration corrections, and current meteorological (met) data.
- Ensures secondary check is made of all entries into the AFATDS/LCU.
- Verifies target plots before processing fire missions and ensures the target location does not violate fire support coordinating measures (FSCMs).
- Ensures the dissemination of the following:
 - Required TSOP reports to higher headquarters.
 - Required database information to the battalion tactical fire direction system and the other platoon's BCS.
 - Tactical and technical fire control measures based upon commander's guidance, including howitzer movement.
- Controls howitzer movement and positioning, and maintains howitzer tracking charts (HTCs).
- Verifies situation map is updated.

FIRE DIRECTION CHIEF

GENERAL DUTIES

2-10. The fire direction chief is the technical expert on technical/tactical fire direction and operation of the AFATDS/LCU. He is the platoon FDO's principal enlisted assistant and performs the duties of the FDO in his absence.

SPECIFIC DUTIES

- Verifies AFATDS/LCU initialization information.
- Ensures secondary check is made of all entries into the AFATDS/LCU.
- Ensures the current met, muzzle velocity variations (MVs), and registration data are entered into the BCS database. Ensures this information is transmitted to the Paladins, using a howitzer (HOW);REQUEST message (see Chapter 3 and Appendix B).
- Verifies database information for each howitzer.
- Ensures all information received is properly posted and verified on situation overlays, status charts, and the HTC.
- Shift supervisor during continuous operations of the POC.

FIRE DIRECTION COMPUTER

2-11. The fire direction computer operates and maintains the LCU. He inputs, updates, and deletes database information as directed. He relays information reported by the howitzers to the FDO or fire direction chief for verification.

FIRE DIRECTION SPECIALIST

2-12. The fire direction specialist posts the situation maps and maintains the HTC's, database charts, and files as directed (i.e., howitzer locations, ammunition status, met data, and MVVs). He maintains and operates AFATDS, radio equipment, command post carrier, and ancillary equipment.

PLATOON SERGEANT

GENERAL DUTIES

2-13. The platoon sergeant is the primary enlisted assistant to the platoon leader and must be prepared to assume the platoon leader's duties. Normally, he is the senior noncommissioned officer (NCO) in the platoon area during firing, moving between the howitzers and the POC to perform his duties.

SPECIFIC DUTIES

- Trains and supervises the howitzer section chiefs.
- Verifies database in AFCS during initialization or as required.
- Plans, coordinates, and conducts Paladin platoon occupations and displacements. Ensures section chiefs know alternate positions throughout the platoon area.
- Conducts independent secondary check of all survey data.
- Ensures verification of howitzer locations (see Chapter 3).
- Coordinates and supervises ammunition distribution plans.
- Verifies howitzer calibration and ensures MV readings are provided to the POC.
- Determines platoon requirements and coordinates with the platoon leader and 1SG for all logistical activities for the platoon.
- Plans and supervises the security of all elements within the platoon, and coordinates with the battery 1SG.
- Enforces navigation updates as required.
- Verifies the confidence test on the howitzer as required. (Refer to TM 9-2350-314-10, *Operator's Manual Howitzer, Medium, Self-Propelled 155 Millimeter M109A6*.)

EQUIPMENT REQUIREMENTS

2-14. A platoon sergeant must have a dedicated vehicle and driver, secure GPS/PLGR, and a long-range radio in order to accomplish his duties.

GUNNERY SERGEANT

GENERAL DUTIES

2-15. The GSG is the primary reconnaissance expert for the platoon. Additionally, he assists the platoon sergeant and must be prepared to assume his duties.

SPECIFIC DUTIES

- Performs in-depth reconnaissance of route and platoon PAs selecting multiple howitzer or pair locations for possible use. This is made easier by use of the GPS. As a minimum he:
 - Verifies the PA location and transmits the location (easting (E), northing (N), and altitude (alt)) and radius per pair (if operating in paired howitzers) to the POC.
 - Coordinates with the BC and survey team for emplacement of survey control points (SCPs).
 - Selects location of SCPs, release points, and rally points as required.
 - Verifies that SCPs are properly marked and conducts independent secondary check of all survey data.
- Assists and advises the BC during battery RSOP planning.
- Selects the location for the POC and makes a radio check with battalion to ensure radio communications capability.
- Provides FDO worst case site to crest data for computation of XO's min QE.
- As required, reconnoiters possible logistics release point (LRP) locations within or close to the PAs ensuring areas selected do not compromise platoon positions.
- Initiates the platoon security plan as a part of his detailed RSOP.
- Identifies the location of any friendly elements within or adjacent to the area of operation.

EQUIPMENT REQUIREMENT

2-16. The GSG is the primary reconnaissance expert for the platoon and spends the majority of his time away from the platoon. He must have his own combat vehicle with a driver, long-range radio, and secure GPS/PLGR.

PALADIN CHIEF OF SECTION

GENERAL DUTIES

2-17. The Paladin chief of section (COS) is responsible for all operations of the Paladin section. He normally positions himself at the DU during firing and movement.

SPECIFIC DUTIES

- Initializes and operates the AFCS while ensuring that independent secondary checks are conducted for procedures.
- Monitors AFCS during navigation.
- Selects firing positions within assigned fire area.
- Selects hasty occupation firing positions for the Paladin while conducting tactical movement.
- Ensures that no more than 16 miles (27 km) is traveled between each navigation update when not GPS/PLGR aided.
- Performs zero-velocity updates (ZUPTs) when prompted unless otherwise directed.

- Ensures digital and voice communications are established and maintained.
- Plans and coordinates for the security of the howitzer section as designated by the platoon sergeant. (Note: The senior COS is responsible for security in multi-howitzer operations).
- Directs personnel rotations between the howitzer and the FAASV. Cross-trains crewmen in all section duties. Special emphasis will be placed on training the gunner and ammunition team chief in the operation of the AFCS.
- Ensures that all required reports are submitted to the POC in an accurate and timely manner.
- Coordinates logistical support and maintenance requirements with the FDO, platoon sergeant, GSG, or platoon leader.
- Supervises preventive maintenance checks and services (PMCS) and other maintenance as directed by applicable technical manuals on assigned equipment.
- Maintains ammunition accountability for both his howitzer and FAASV.

DUTIES BEFORE FIRING

- Ensures the AFCS is properly initialized/updated/checked at an established SCP.
- Operates or supervises the operation of the AFCS in both operational and degraded modes. Monitors and verifies all data input into the AFCS.
- Selects a suitable firing position.
- Designates the position for the FAASV.
- Operates the AFCS, radios, and hydraulic control box.
- Directs the driver to orient the howitzer on the general direction of the AOF provided by the POC.
- Commands "PREPARE FOR ACTION."
- Supervises the conduct of prefire checks.
- Assists the driver with the travel lock by elevating the cannon tube with the COS hydraulic control handle.
- Verifies the position location by use of a GPS/PLGR aiding, independent GPS/PLGR, a SCP, adjacent howitzer with good location, or map spot. Map spot is the least reliable but most readily available method when not GPS/PLGR aiding.
- Records position data.
- Determines maximum tube elevation.
- Determines site data.
- Sends piece status. (At this point, the howitzer is considered "ready to fire".)
- Establishes a distant aiming point (DAP) if available.
- Ensures the ammunition data for the howitzer and FAASV are correct, accurately input into the AFCS, and updated after each fire mission.
- Ensures an accurate powder temperature is input in the AFCS and is updated as required.

- Ensures the gunner verifies boresight.

DUTIES UPON RECEIPT OF FIRE MISSION

- IAW TM 9-2350-314-10, Chapter 2-15.

PREPARATION FOR MOVEMENT

- Commands "MARCH ORDER."
- Gives movement instructions to the ammunition team chief (ATC).
- Normally, the section moves on its own (for survivability moves) based on guidance received from the POC and under the direction of the senior COS.
- Transmits a piece status upon completion of the move.

GUNNER

2-18. The gunner must be aware of the status of the section and prepared to assume the duties of the COS or the ATC to facilitate 24-hour operations. He operates the AFCS as directed by the COS.

DUTIES BEFORE FIRING

- Unlocks turret lock, secures ballistic shield, and releases spade pins as required.
- Assists with determining mask data by sighting through the bore and directing the COS's movement of the tube.
- Conducts prefire checks as directed by the chief.
- Establishes an alternate aiming point using a DAP (if available) or emplaces the collimator (as required). Records data to the alternate aiming point.
- Reports the temperature of the propellant being fired (on-board howitzer, FAASV, or outside cache) to the COS every two hours or as required by TSOP/POC.

DUTIES UPON RECEIPT OF FIRE MISSION

- Assists the COS in conducting safe howitzer operations.
- Announces the propellant and charge, prepares charge, loads charge, closes breech, and ensures unused increments are stowed in propellant canister.
- Verifies firing data on DU by checking for the following: lay key is backlit, actual and commanded QE and deflection (df) match, and the prompt, "warning tube is not in laid position" is not displayed. If data is correct, the gunner announces "VERIFIED." If data is not verified or data is incorrect, he announces "CHECK FIRING."

PREPARATION FOR MOVEMENT

- Locks the turret lock and secures the ballistic shield.
- Notifies the COS that the howitzer is ready to move.
- Monitors and reports AFCS data to COS during movement.

NUMBER 1 CANNONEER

DUTIES BEFORE FIRING

- IAW TM 9-2350-314-10, Chapter 2-15.

DUTIES UPON RECEIPT OF FIRE MISSION

- IAW TM 9-2350-314-10, Chapter 2-15.

PREPARATION FOR MOVEMENT

- IAW TM 9-2350-314-10, Chapter 2-15.

HOWITZER DRIVER

DUTIES BEFORE FIRING

- Records mileage after last navigation update. Reports to COS when howitzer approaches 16 miles (27 km) since last update.
- Conducts prefire checks.
- Closes the driver's hatch.
- Sets the throttle to 1000-1200 revolutions per minute (RPM) while operating the hydraulic system.
- Operates the remote travel lock and commands "ELEVATE".
- Scans his sector defined by the chief and reports any unusual activity.

DUTIES UPON RECEIPT OF FIRE MISSION

- Ensures driver's hatch is closed, and remains in the driver's compartment and monitors instruments.
- Sets the throttle to 1000-1200 RPM.
- Records firing data on Department of the Army (DA) Form 4513, *Record of Missions Fired*.
- Scans his immediate front and reports any unusual activity.

PREPARATION FOR MOVEMENT

- Maintains DA Form 4513 IAW FM 6-50.
- Operates the travel lock.

AMMUNITION TEAM CHIEF

2-19. The ATC must be proficient in mounted land navigation. He must be prepared to assume the duties of the gunner or COS during 24-hour operations. He supervises the cannoneers assigned to the FAASV and must be capable of operating the AFCS.

DUTIES BEFORE FIRING

- Positions the FAASV as directed.
- Commands "PREPARE FOR ACTION."
- Starts the auxiliary power unit (APU) and positions conveyor.

- Reports the current ammunition inventory and powder temperature to COS as needed.

DUTIES UPON RECEIPT OF FIRE MISSION

- Maintains DA Form 5969-R, *Section Chief's Report*.
- Verifies shell, charge, fuze setting (when in the mated position), and reports powder temperature as required.

PREPARATION FOR MOVEMENT

- Secures the conveyor and shuts down the APU.

AMMUNITION VEHICLE DRIVER

DUTIES BEFORE FIRING

- Positions the FAASV as directed by the ATC.
- Sets the brakes.
- Remains in the driver's compartment, monitors the instruments as required, and scans his sector as defined by the ATC.

DUTIES DURING FIRING

- The driver performs duties as directed by the ATC.

PREPARATION FOR MOVEMENT

- Releases the brakes and prepares to move.

NUMBER 2 CANNONEER

2-20. The number 2 cannoneer is normally the second senior soldier on the FAASV. He must be prepared to assume the duties of the ATC during continuous operations.

DUTIES BEFORE FIRING

- Opens the lower rear door and extends the conveyor for operation, assisted by the number 4 cannoneer.
- Connects (if mated) communications between the FAASV and the howitzer as required.
- Places the powder thermometer in the powder charge, prepares powder charges for firing and reports powder temperature to the ATC.
- As directed by the CS, helps the gunner emplace the collimator (for mated operations).

DUTIES DURING FIRING

- Prepares powder charges.
- Carries ammunition to the howitzer if required.

PREPARATION FOR MOVEMENT

- Disconnects (if mated) communications between the howitzer and the FAASV as required.
- Retracts the conveyor and closes the rear door.

NUMBER 3 CANNONEER

DUTIES BEFORE FIRING

- Prepares the conveyor for operation.
- Prepares ammunition for firing.

DUTIES DURING FIRING

- Places the projectile on the conveyor dead-end section.
- Operates the conveyor controls.

PREPARATION FOR MOVEMENT

- Assists the number 2 cannoneer in retracting the conveyor.

NUMBER 4 CANNONEER

DUTIES BEFORE FIRING

- Prepares the conveyor for operation, assisted by the number 2 cannoneer.

DUTIES DURING FIRING

- Prepares ammunition for firing.
- Carries ammunition to the howitzer as directed.

DUTIES AFTER FIRING

- Returns ammunition to the stowed configuration.